What is claimed is:

1. A synchronous signal generator converting output which is a sine wave from a crystal oscillator of an oscillation frequency f into a pulse of a rectangular waveform by a pulse converter, wherein

output which is a sine wave from the crystal oscillator is passed through a filter equal to the oscillation frequency f in center frequency f0, and is input into the pulse converter.

2. The synchronous signal generator according to claim 1, wherein

said filter is a crystal filter equal to the crystal oscillator in frequency-temperature characteristic.

3. The synchronous signal generator according to claim 2, wherein

respective crystal pieces used for the crystal oscillator and the crystal filter have an equal cutting angle.

4. The synchronous signal generator according to claim 1, wherein

said oscillation frequency f is equal to a frequency of a fundamental wave component output from the crystal oscillator.

5. The synchronous signal generator according to claim 1, wherein

said pulse converter is a complementary output driver IC.

6. A synchronous signal generator, comprising:

a crystal oscillator unit oscillating an output signal;

a filter unit converting an output signal from the crystal oscillator unit into a signal close to an ideal sine wave, and outputting the converted signal; and

a pulse conversion unit outputting a pulse of a rectangular waveform based on output of said filter unit.

7. The synchronous signal generator according to claim 6, wherein

said filter unit converts the signal such that a level of a specific frequency component in the output signal from said crystal oscillator unit can be relatively higher than levels of other frequency

components, and outputs a resultant signal.

8. The synchronous signal generator according to claim 7, wherein

said filter unit is a band pass filter having an oscillation frequency of said synchronous signal generator as a center frequency.

9. The synchronous signal generator according to claim 6, wherein

said filter unit is equal to said crystal oscillator unit in frequency-temperature characteristic.

10. The synchronous signal generator according to claim 9, wherein

said filter unit is formed by a crystal filter equal to said crystal oscillator unit in cutting angle of crystal piece.

11. A synchronous signal generator, comprising:

a crystal oscillator means for oscillating an output signal;

a filter means for converting an output signal from the crystal oscillator means into a signal close

to an ideal sine wave, and outputting the converted signal; and

a pulse conversion means for outputting a pulse of a rectangular waveform based on output of said filter means.

12. A synchronous signal generating method obtaining a synchronous signal from output of crystal oscillator unit oscillating an output signal, comprising:

converting an output signal from said crystal oscillator unit into a signal closed to an ideal sine wave; and

converting the converted signal into a pulse signal of a rectangular waveform.